

Bridge No. 12034
HA-1867
MD 136 over James Run
Cresswell vicinity
1931
Public

Constructed circa 1931, Bridge No. 12034 is a single-span, concrete beam structure, 29 feet in length. The bridge's concrete parapets are open balustrades with paneled endposts. Steel w-beam guardrails are attached to the parapets. The substructure consists of striated concrete abutments and flared wing walls.

The Maryland State Roads Commission (SRC) built Bridge No. 12034 as part of early twentieth century roadway improvements in Harford County. The bridge is a significant example of concrete beam construction and an example of the work of the SRC in the 1930s.

Maryland Historical Trust

Maryland Inventory of Historic Properties Form

Inventory No. HA-1867

1. Name of Property (indicate preferred name)

historic Bridge No. 12034
other MD 136 over James Run

2. Location

street and number MD 136 (Calvary Road) not for publication
city, town Creswell x vicinity
county Harford

3. Owner of Property (give names and mailing addresses of all owners)

name Maryland State Highway Administration
street and number 707 N. Calvert Street telephone 800-548-5026
city, town Baltimore state MD zip code 21202

4. Location of Legal Description

courthouse, registry of deeds, etc. N/A tax map and parcel: N/A
city, town N/A liber N/A folio N/A

5. Primary Location of Additional Data

☐ Contributing Resource in National Register District
☐ Contributing Resource in Local Historic District
☒ Determined Eligible for the National Register/Maryland Register
☐ Determined Ineligible for the National Register/Maryland Register
☐ Recorded by HABS/HAER
☐ Historic Structure Report or Research Report at MHT
☒ Other: Historic Bridge Inventory

6. Classification

Category	Ownership	Current Function	Resource Count
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> agriculture	Contributing Noncontributing
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> commerce/trade	0 0 buildings
<input checked="" type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> defense	0 0 sites
<input type="checkbox"/> site		<input type="checkbox"/> domestic	1 0 structures
<input type="checkbox"/> object		<input type="checkbox"/> education	0 0 objects
		<input type="checkbox"/> funerary	1 0 Total
		<input type="checkbox"/> government	
		<input type="checkbox"/> health care	
		<input type="checkbox"/> industry	
		<input type="checkbox"/> landscape	
		<input type="checkbox"/> recreation/culture	
		<input type="checkbox"/> religion	
		<input type="checkbox"/> social	
		<input checked="" type="checkbox"/> transportation	
		<input type="checkbox"/> work in progress	
		<input type="checkbox"/> unknown	
		<input type="checkbox"/> vacant/not in use	
		<input type="checkbox"/> other:	

Number of Contributing Resources previously listed in the Inventory
1

7. Description

Inventory No. HA-1867

Condition

<input type="checkbox"/> excellent	<input checked="" type="checkbox"/> deteriorated
<input type="checkbox"/> good	<input type="checkbox"/> ruins
<input type="checkbox"/> fair	<input type="checkbox"/> altered

Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

Bridge No. 12034 carries MD 136 (Calvary Road) over James Run in the Creswell vicinity in a rural area of central Harford County. MD 139 runs north-south and James Run runs northwest-southeast. The area immediately adjacent to the bridge is wooded. There are several residences to the south of the bridge and an active stone quarry east of the bridge.

Constructed circa 1931, Bridge No. 12034 is a single-span, concrete beam structure, 29 feet in length. The bridge's concrete parapets are open balustrades with paneled endposts. Steel w-beam guardrails are attached to the parapets. The substructure consists of striated concrete abutments and flared wing walls. The bridge is on a skewed angle to James Run.

Currently, Bridge No. 12034 is in an overall deteriorated condition with a structural sufficiency rating of 47.5. There has been significant deterioration of both the superstructure and the substructure, and both have received extensive repairs. Exterior and interior girders are cracked and have heavy efflorescence. The concrete abutments are severely eroded along the waterline. Both the north and south abutments have large spalls along the centerline with heavy erosion extending from the spall on both sides. The northwest wing wall has been covered with smooth concrete, obscuring the original scored pattern. Both the west and east parapets are severely deteriorated with areas of heavy scale. The paneled endposts are crumbling, and several balustrades consist solely of exposed rebar with no concrete remaining.

According to the *Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report* (PAC Spero, 1995), character-defining elements (CDEs) of concrete beam bridges include the slab, longitudinal beams, parapets, abutments, and wing walls. Bridge No. 12034 retains the majority of its CDEs, although the integrity of the parapets, abutments, and wing walls has been compromised due to deterioration and alteration.

8. Significance

Inventory No. HA-1867

Period	Areas of Significance	Check and justify below		
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> health/medicine	performing arts
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> archeology	<input type="checkbox"/> education	<input type="checkbox"/> industry	philosophy
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> architecture	<input checked="" type="checkbox"/> engineering	<input type="checkbox"/> invention	politics/government
<input checked="" type="checkbox"/> 1900-1999	<input type="checkbox"/> art	<input type="checkbox"/> entertainment/ recreation	<input type="checkbox"/> landscape architecture	religion
<input type="checkbox"/> 2000-	<input type="checkbox"/> commerce	<input type="checkbox"/> ethnic heritage	<input type="checkbox"/> law	science
	<input type="checkbox"/> communications	<input type="checkbox"/> exploration/ settlement	<input type="checkbox"/> literature	social history
	<input type="checkbox"/> community planning		<input type="checkbox"/> maritime history	<input checked="" type="checkbox"/> transportation
	<input type="checkbox"/> conservation		<input type="checkbox"/> military	other:

Specific dates	1931	Architect	State Roads Commission
Construction dates	1931	Builder	unknown

Evaluation for:

☐ National Register

☐ Maryland Register

☐ not evaluated

Prepare a one-paragraph summary statement of significance addressing applicable criteria, followed by a narrative discussion of the history of the resource and its context. (For compliance reports, complete evaluation on a DOE Form - see manual.)

The Maryland State Roads Commission (SRC) built Bridge No. 12034 as part of early twentieth century roadway improvements in Harford County. The bridge is a significant example of concrete beam construction and an example of the work of the SRC in the 1930s.

As early as 1794, a north-south roadway existed in the vicinity of Bridge No. 12034, but east of the current alignment of MD 136. Nineteenth century historic maps of the area show a crossroads community to the southeast of Bridge No. 12034 that included Webster's Mill, a schoolhouse, and a church, as well as a road that crossed James Run to the southeast of the current bridge location. Historic topographic maps show that the MD 136 crossing of James Run was realigned to the west between 1901 and 1948.

Early twentieth-century road improvements in Harford County were fueled by several factors. The Good Roads Movement, which began in the last decade of the nineteenth century, aimed to improve primary roads throughout the state, as well as multiple connecting roads between counties. As the movement progressed, numerous existing roads were widened, straightened, or graded, and many new bridges were built to carry the rebuilt roads. In the 1920s, the SRC emphasized improving the safety and comfort of primary routes while developing secondary networks and feeder roads. By the 1930s, bridges that were originally deemed adequate had become unacceptable for carrying increasing traffic loads and many new structures were built as a result. The realignment of present-day MD 136 most likely occurred at the time of Bridge No. 12034's construction. This realignment may have served both to eliminate a curve in the roadway and to provide a new crossing of James Run that could better handle increased traffic loads.

Bridge No. 12034 was built according to SRC standardized plans. Widespread use of standardized bridge plans came about in the early twentieth century. Standardized design helped meet the need for inexpensive, easily built and maintained road bridges. Reinforced concrete proved to be a versatile material that permitted the development of a variety of economical bridges for the use on roads crossing small streams and rivers. Two national organizations, the American Association of State Highway Officials (AASHTO) and the U.S. Bureau of Public Roads, were instrumental in bringing about standardization. AASHTO's Subcommittee on Bridges and Structures first issued its standard specification in 1925. The U.S. Bureau of Public Roads conducted extensive tests on bridge types and promulgated standard designs for concrete highway

Maryland Historical Trust

Maryland Inventory of Historic Properties Form

Inventory No HA-1867

Name Bridge No. 12034

Continuation Sheet

Number 8 Page 2

bridges from 1916 to 1931.

Bridge No. 12034 was inventoried as part of SHA's Historic Bridge Inventory in 1996, and the Interagency Historic Bridge Committee determined it to be eligible for inclusion in the National Register of Historic Places (NRHP) in 2001. Due to the deteriorated condition, the Maryland State Highway Administration plans to replace the bridge in the summer of 2006.

Maryland Historical Trust

Maryland Inventory of Historic Properties Form

Inventory No. HA-1867

Name Bridge No. 12034

Continuation Sheet

Number 8 Page 1

HISTORIC CONTEXT

MARYLAND COMPREHENSIVE PRESERVATION PLAN DATA

Geographic Organization: Piedmont

Chronological/Developmental Period(s): Modern Period

Historic Period Theme(s): Transportation

Resource Type: Concrete Beam Bridge

Category: Structure

Historic Environment Rural Stream Crossing

Historic Function(s) and Use(s): Transportation

Known Design Source: State Roads Commission

9. Major Bibliographical References

Inventory No. HA-1867

1996 Maryland Historic Bridge Inventory
1858 Jennings & Herrick's Map of Harford County Maryland
1878 Martenet's Map of Harford County Maryland

10. Geographical Data

Acreage of surveyed property	<u>approx. 0.02</u>		
Acreage of historical setting	<u>approx. 0.02</u>		
Quadrangle name	<u>Bel Air</u>	Quadrangle scale	<u>1:24,000</u>

Verbal boundary description and justification

The boundary encompasses Bridge No. 12034 and the ground on which it stands. The boundary isolates the bridge from adjacent areas that are not directly associated with the history of the bridge.

11. Form Prepared By

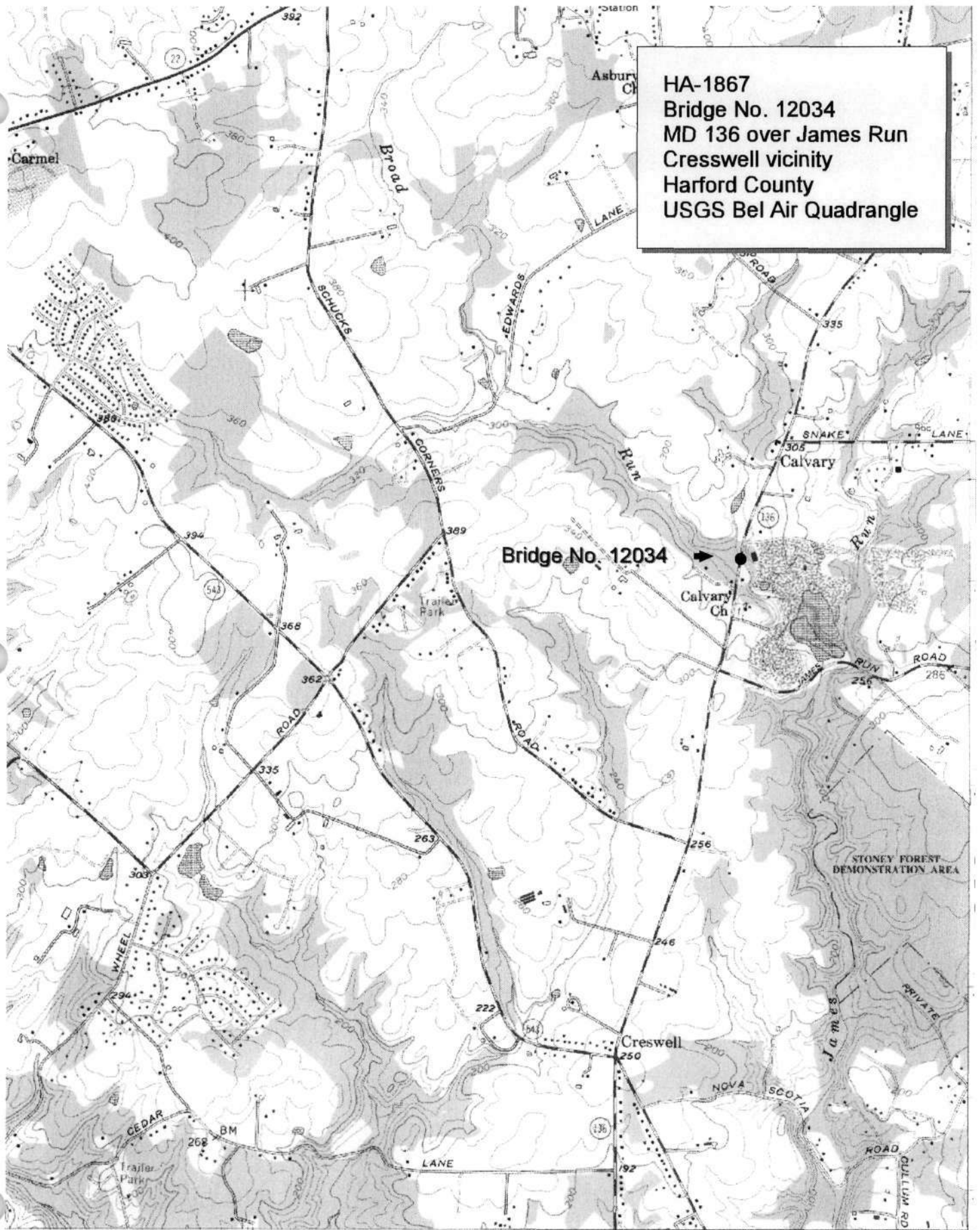
name/title	Melissa Hess		
organization	State Highway Administration	date	04/13/2006
street and number	707 North Calvert Street	telephone	410-545-856
city or town	Baltimore	state MD	zipcode 21202

The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
DHCD/DHCP
100 Community Place
Crownsville MD 21032
410-514-7600

HA-1867
Bridge No. 12034
MD 136 over James Run
Cresswell vicinity
Harford County
USGS Bel Air Quadrangle



Bridge No. 12034

Calvary Ch

Calvary

Cresswell

STONEY FOREST
DEMONSTRATION AREA

388

17°30'

390

1:9 MI. TO MD. 7

39°20'00" E

76°

1 MILE

ROAD CLASSIFICATION



Maryland Historical Trust

Maryland Inventory of Historic Properties number: HA 1867

Name: MD 136 over James Run / #12034

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <u>X</u>	Eligibility Not Recommended _____
Criteria: <u>A</u> <u>B</u> <u>C</u> <u>D</u> Considerations: <u>A</u> <u>B</u> <u>C</u> <u>D</u> <u>E</u> <u>F</u> <u>G</u> None	
Comments: <u>SHA will replace in 2001-2002</u>	
Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

MARYLAND INVENTORY OF HISTORIC PROPERTIES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST

MHT NO. HA-1867

NAME AND SHA NO.: 12034

LOCATION

Road Name and Number: MD 136 over James Run

City/Town: Creswell X vicinity

County: Harford

Ownership: X State County Municipal Other

Bridge projects over: Road Railway X Water Land

Is bridge located within designated district?: yes X no
 NR listed district NR determined eligible district
 locally designated other
Name of District

BRIDGE TYPE

- Timber Bridge
 Beam Bridge Truss-Covered Trestle Timber-and-Concrete
- Stone Arch Bridge
- Metal Truss Bridge
- Moveable Bridge
 Swing Bascule Single Leaf Bascule Multiple Leaf
 Vertical Lift Retractable Pontoon
- Metal Girder
 Rolled Girder Rolled Girder Concrete Encased
 Plate Girder Plate Girder Concrete Encased
- Metal Suspension
- Metal Arch
- Metal Cantilever
- X Concrete
 Concrete Arch Concrete Slab X Concrete Beam Rigid Frame
 Other Type Name

DESCRIPTION

Describe the Setting:

Bridge 12034 carries MD 136 over James Run in the Creswell area of Harford County which lies within the Piedmont physiographic province of central Maryland. MD 136 travels in a north-south direction at this location; James Run flows west-east. The creek is situated in a wooded rural area; several residential structures are located south of the structure.

Describe the Superstructure and Substructure: (Discuss points identified in Context Addendum, Section C)

Bridge 12034 is a single-span concrete tee-beam structure with a total bridge length of 29'. The span measures 28' and supports a concrete deck topped by an 26'-5" wide asphalt roadway. The bridge exhibits a slight skew as it spans James Run. The estimated date of construction is 1931, since this bridge is similar to the 1930 MSHA standard. Both of the open balustrade concrete parapets are divided into three sections with ten openings in each section. Steel W-beam guardrails are attached to the paneled endposts of the parapets. The substructure consists of striated concrete abutments and flared wing walls.

Recent photographs dated January 1995 depict severe cracking and settling at the northwest corner of the bridge. These photographs also depict severe disintegration and spalling of the concrete parapets and the eastern headwall.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Slightly more than two-thirds (76) of that total were single-span bridges.

Discuss major alterations:

Available documentary evidence suggests that the bridge has not undergone any major alterations since its construction.

HISTORY

When Built: c. 1930

Why Built: Statewide road improvement programs and local transportation needs

Who Built: State Roads Commission of Maryland

Who Designed: Unknown

Why Altered: Unknown

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HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST**

MHT NO. HA-1867

Was this bridge built as part of an organized bridge building campaign?: No

This bridge was built during the Good Roads Movement era but was not one of the primary corridors slated for improvement.

SURVEYOR ANALYSIS

This bridge may have NR significance for association with:

☐ A (Events) ☐ B (Person) ☐ C (Engineering/Architectural Character)

Was this bridge constructed in response to significant events in Maryland or local history?

The improvement of Harford County roads most likely resulted from several events that occurred during the first three decades of the twentieth century. The original Good Roads movement was aimed toward improving the primary routes through the state as well as connecting roads between counties. A later impact of this crusade included the widening, straightening, and grading of secondary roads, and construction of new bridges to carry these rebuilt roads. Further, the rapid increase of automobile, truck, and bus traffic prompted the replacement of the existing narrow and weak bridges with new, wider, and stronger concrete structures. As time, labor, and money-saving plans created by the State Roads Commission (SRC), the establishment of district engineering offices during the 1910s and the development of standardized bridge designs also aided in the construction of modern bridges throughout the state. During the 1920s, emphasis of the SRC was on improving safety and comfort of main routes while building up the secondary roads and the farm-to-market network of feeder roads. By the 1930s, bridges believed to be adequate when initial road reconstruction was undertaken became unacceptable for modern traffic and many new structures were constructed.

When the bridge was built, and/or given a major alteration, did it have a significant impact on the growth and development of the area?

No, the construction of this bridge did not play an active role in the growth or development of this portion of Harford County.

Is the bridge located in an area which may be eligible for historic designation, and would the bridge add or detract from the historic and visual character of the possible district?

No, this bridge is not located within an area which is eligible for historic district designation.

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Is the bridge a significant example of its type?

No, due to its poor condition, this bridge does not stand as a significant example of its type.

Does the bridge retain integrity of the important elements described in the Context Addendum?

No, this bridge does not retain integrity of its character defining elements. Recent reports indicate that the structure exhibits severe signs of age and wear, including cracking, spalling, and disintegration of the parapets, headwalls, abutments, and wing walls.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer, and why?

No, this bridge is not a significant example of the work of the manufacturer, designer, and/or engineer. This bridge was most likely built to standard state specifications, which corresponded to the structure's span length and year.

Should this bridge be given further study before significance analysis is made, and why?

No, this bridge should not receive further study.

BIBLIOGRAPHY

Crosby, Walter Wilson

1906 *First Report on State Highway Construction (May 1905-January 1906)*. The Johns Hopkins Press, Baltimore.

1908 *Second Report on State Highway Construction (January 1906-January 1908)*. The Johns Hopkins Press, Baltimore.

Johnson, A.N.

1903 *Third Report on the Highways of Maryland (1902-1903)*. The Johns Hopkins Press, Baltimore.

LeViness, Charles T.

1958 *A History of Road Building in Maryland*. State Roads Commission of Maryland, Baltimore.

**MARYLAND INVENTORY OF HISTORIC PROPERTIES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST**

MHT NO. HA-1867

Maryland State Highway Administration

1987-93 Bridge inspection reports. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

P.A.C. Spero and Company and Louis Berger and Associates, Inc.

1994 *Historic Bridges in Maryland: Historic Context Report*. Prepared for Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore.

State Roads Commission of Maryland

1930 *Reports of the State Roads Commission of Maryland for the Years 1927, 1928, 1929, and 1930*. State of Maryland, State Roads Commission, Baltimore.

1959-80 Bridge inspection reports. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

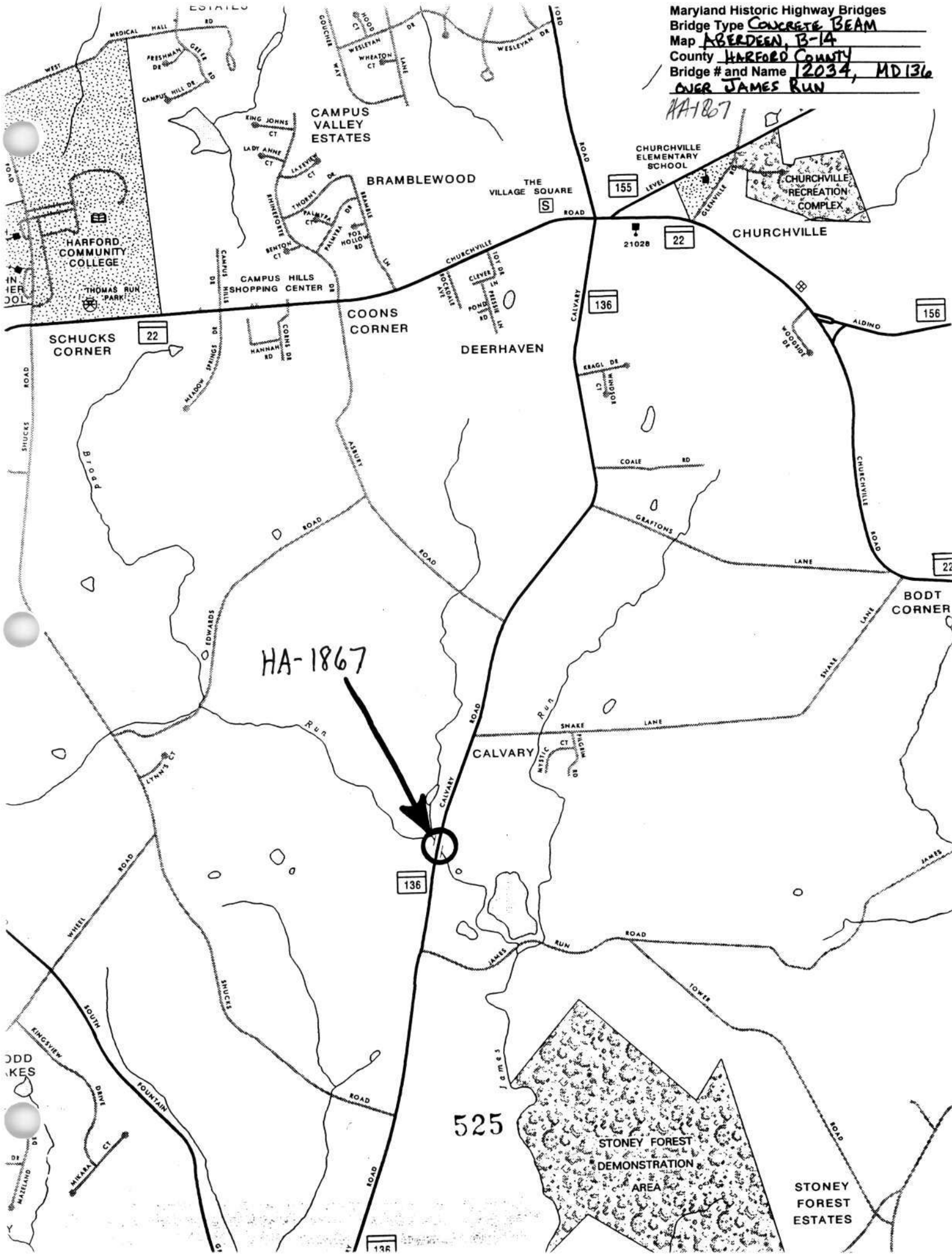
SURVEYOR INFORMATION

Name: Margaret A. Bishop and Michelle M. Lupien
Organization: KCI Technologies, Inc.
Address: 5001 Louise Dr., Suite 201
Mechanicsburg, PA 17055

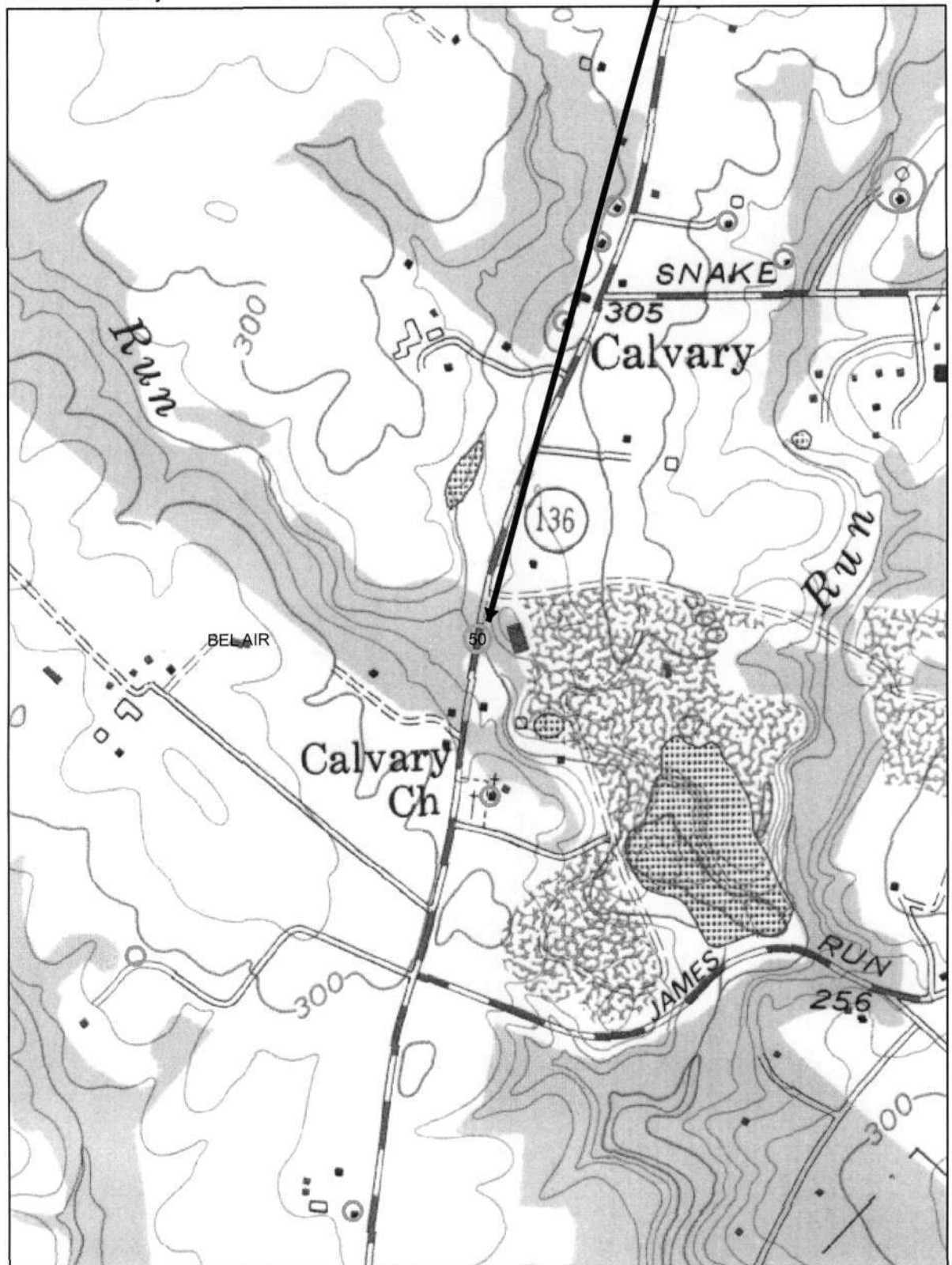
Date: 13 May 1996
Telephone: (717) 691-1340

Maryland Historic Highway Bridges
Bridge Type Concrete Beam
Map ABERDEEN, B-14
County HARFORD County
Bridge # and Name 2034, MD136
OVER JAMES RUN

HA-1867



HA-1867
Bridge No. 12034
MD 136 over James Run
Aberdeen
Aberdeen Quad
Harford County





UP 1867

HARFORD COUNTY MD

JOHN TARQUINIO

24 JAN 1995

~~MARYLAND SHPD~~ SMA

STATE HIGHWAY BRIDGE 12034 OVER
VIEW LOOKING NORTH JAMES RUN
ON MD ROUTE 136

1/4



HP-1367

HARFORD COUNTY, MD

JOHN TARQUINIO

24 JAN 1995

~~MARYLAND SHPD~~ SHA

STATE HIGHWAY BRIDGE 12034 OVER

VIEW LOOKING SOUTH JAMES RUN

ON MD ROUTE 136

2/4



HA-1867

HARFORD COUNTY, MD

JOHN TARQUINO

24 JAN 1995

~~MARYLAND SHPO~~ S/HA

STATE HIGHWAY BRIDGE 12034 OVER JAMES
VIEW LOOKING EAST RUN

3/4

JAN 95 04 NNMC 31



HA-1867

HARFORD COUNTY, MD

JOHN TARQUINIO

24 JAN 1995

~~MARYLAND SHPO~~ SHA

STATE HIGHWAY BRIDGE 12034 OVER

VIEW LOOKING WEST

JAMES RUN

4/4